In the United States Patent and Trademark Office

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OCT 12 2005

In re the Application of:

Viktors Berstis	)	
Serial Number: 10/015,492	)	Group: 2625
Docket Number: AUS920011012US1	)	Examiner: Sathyanaraya V. Perungavoor
Filed on: 12/13/2001	)	
For: "System and Method for Anti-Moiré	)	
Imaging in a Two Dimensional Sensor	)	
Array"	)	

APPEAL BRIEF

Real Party in Interest per 37 CFR §41.37(c)(1)(i)

The subject patent application is owned by International Business Machines Corporation of Armonk, NY.

Related Appeals and Interferences per 37 CFR §41.37(c)(1)(ii)

The present patent application is related to US Patent Application number 10/015,880, docket number AUS920011011US1, which is under appeal from final rejections. No decision from a court or the Board has been rendered in this related appeal.

Status of Claims per 37 CFR §41.37(c)(1)(iii)

Claims 1 - 19 were finally rejected in the Examiner's decision of May 16, 2005. Claims 1, 7, 9, and 12 were amended on February 3, 2005. Claims originally filed numbered as 16 - 20 were renumbered to 15- 19 by the examiner, as no claim number 15 was originally presented.

The rejections of Claims 1 - 19 were appealed by Appellant on September 16, 2006.

Status of Amendments after Final Rejections per 37 CFR §41.37(c)(1)(iv)

No amendments to the claims have been submitted or entered after final rejections.

Summary of the Claimed Subject Matter per 37 CFR §41.37(c)(1)(v)

The invention relates to devices and methods for producing sampled images, such as digital or digitized images, in a manner to avoid producing Moiré patterns. A two-dimensional sensor array is provided which has non-uniformly spaced sensors such that it avoids production of an inherent "frequency" that may interfere or resonate with details or harmonics present in the image source. The sensors are disposed in the a two-dimensional, non-uniform pattern according to a predetermined scheme or function. An image is captured using the non-uniformly placed sensors, and optionally, linear interpolation is applied to the non-uniformly spaced data set to yield a synthesized uniformly-spaced data set for use in common imaging formats and processing, such as JPEG or MPEG compression and decompression.

More specifically, we have claimed method, computer-readable medium and system embodiments of the invention in independent claims 1, 9, and 12, respectively, as follows:

(a) determining a plurality of sensor positions having a position-to-position spacing in a first axis (pg. 11, lines 11 - 17) from a datum point according to a first non-uniform predictable deterministic distribution schema (pg. 12 line 6 - pg. 13 line 2), and each position having a spacing in a second axis (pg. 11, lines 20 - 22) from the datum point according to a second predictable deterministic non-uniform distribution schema (pg. 12 line 6 - pg. 13 line 2);

(b) providing a two-dimensional array of sensors, each sensor being positioned on the array according to the determined positions in said first and second axes (pg. 17 lines 1 - 7, pg. 14 lines 10 - 19) ; and

(c) providing a means for sampling (pg. 10 lines 9 - 11, pg. 17 lines 8 - 9) said sensors such that a two-dimensional imaging sensor array having non-uniform sensor distribution is realized.

An advantage to our invention is that the use of a predictable deterministic function to calculate the position of a sensor in one or two axes allows for an image data set (e.g. the actual data samples in a JPEG or bitmap file) to be properly interpreted by a recipient without the need for any look up tables (pg. 12 lines 10 - 13) to be associated with the image or complicated image processing functions, only requiring the knowledge of the actual distribution function parameters and a seed value (e.g. CRC parameters and values) (pg. 12 line 21 - pg. 13 line 2).

Grounds for Rejection For Which Review is Sought per 37 CFR §41.37(c)(1)(vi)

Appellant requests review by the Board of the rejections of claims 1 - 19 under 35 U.S.C. §103(a) as being unpatentable over U.S. patent 4,574,311 to Resnikoff, *et al.* (hereinafter "Resnikoff") in view of publication "Lfsr Counters Implement Binary Polynomial Generators" by Balph (hereinafter "Balph").

Arguments per 37 CFR §41.37(c)(1)(vii)

Rejections of Claims 1 - 19 over Resnikoff inView of Balph

In the rationale for the final rejections of Claims 1 - 4, 6 - 9, 10, 12 - 17, and 19 - 21 Resnikoff in view of Balph, it was reasoned that Resnikoff's disclosure of a "Poisson disc process" is a distribution schema which can be applied to two-dimensional sampling techniques. It was reasoned that Resnikoff does not teach that the schema is "predictable deterministic" as we have claimed.

It was reasoned that Balph's teaching of a non-linear counter based on a set of feedback shift registers was such a predictable deterministic schema, and it was postulated that Balph's disclosed object of reducing logic would have been the motivation by one of ordinary skill in the to replace Resnikoff's Poisson disc process with Balph's non-linear counter. Appellant respectfully disagrees.

References Are Not In Same Field of Endeavor. It was reasoned in the rejections that Balph and Resnikoff's invention belong to the same field of endeavor. Balph's non-linear counter is a deterministic process, while Resnikoff's Poisson disc process is a probabilistic process (e.g. Poisson distribution is well known in the art of probability and statistics). No citation has been made by examiner from Resnikoff wherein Resnikoff suggests replacing their probabilistic function with a deterministic function. Resnikoff does disclose a look up table, but one in which the data points are generated using a probabilistic function, and thus the schema using the table generates sensor positioning which is related to probability, not determinism.

No Suggestion or Motivation Found; Misinterpretation of Balph's Object. A question that remains is whether or not Balph provides the motivation to combine as proposed in the rationale for the rejection. Balph's invention is directed toward "binary counters":

> You can use linear-feedback shift registers (LFSRs) **as alternatives to conventional bi-nary counters** (Reference 1). (Balph, page 1, col. 1, first line, emphasis added)

This is the extent of suggestion by Balph, to use LFSRs in place of binary counters. The next sentence in Balph's disclosure has been argued to provide the motivation to use Balph's alternative to binary counters in place of Resnikoff's Poisson probability schema:

> An LFSR reduces the amount of required logic and minimizes routing complexity. (Balph, page 1, col. 1, second sentence, emphasis added)

Balph's suggestion regarding logic minimization at this point in the reference applies to minimizing the logic of *traditional binary counter designs*. There is no suggestion or reason to believe that Balph is stating that use of an LFSR would decrease the logic complexity of a look up table or Poisson probability function. In fact, Balph's disclosure is silent as to application of LFSR's to probabilistic applications, and certainly Balph's remaining disclosure is non-enabling for that purpose.

Balph suggests that their LFSR can also be used as a pseudo-random number generator, but this is a well known use which we have also noted in our disclosure, although we referred to such a logical structure as a CRC polynomial:

> These generators find **common use** for pseudorandom-number generation. (Balph, pg. 1, col. 1, fifth sentence, emphasis added).

Balph's counter alternative produces number in a sequential manner in which no number is repeated twice until each and every other possible number has been produced in sequence, as any good counter circuit should do:

> Through simulation, you can observe the count sequence and verify that the selected polynomial repeats after 2n-1 states ... and that no state repeats within each sequence. (Balph, col. 3, lines 12 -15).

This type of even distribution of numbers in a sequence is known as a "uniform" distribution:

> **uniform distribution (continuous)**
> In mathematics, the continuous uniform distributions are probability distributions such that all intervals of the same length are equally probable. ...
>
> **uniform distribution (discrete)**
> In probability theory and statistics, the discrete uniform distribution is a discrete probability distribution that can be characterized by saying that all values of a finite set of possible values are equally probable. ...
>
> (Source: www.wikipedia.com)

However, Resnikoff specifies use of a pseudo-random generator which produces numbers with a Poisson distribution:

> ... The term "pseudo-random" is used because, while the distribution of the sensor elements in the array is random, **the distribution is arrived at by using specific algorithms to be disclosed hereinafter**. In this description, the terms "pseudo-random" and "random" are used interchangeably. ... (Resnikoff, col. 4, lines 26 - 31, emphasis added)
>
> ...
>
> A method of manufacturing the sensing device of this invention comprises the steps of randomly generating a series of numbers corresponding to the coordinates of points on the substrate relative to a fixed position until the number of points corresponds to a desired sampling rate. The barycenter of each sensor element is then located at one of these points, and the areas of the sensor elements selected to provide isolation of each element from its adjacent elements. To provide uniform response, the areas of the sensor elements must be substantially equal to each other. This method produces an array of sensors on the substrate **having a Poisson distribution**. (Resnikoff, col. 4 line 67 to col. 5 line 11, emphasis added).

Hence, Resnikoff's "specific algorithm" involves use of the "barycenter" of the sensors, and achieves a *Poisson* distribution. There are known in the art pseudo-random generator processes which achieve other distributions, such as Uniform, Gaussian, Exponential, LaPlace, Weibull, Cauchy, Raleigh, Lognormal, Gumbel, Bernoulli, Geometric, Binomial, etc., but Resnikoff specifies Poisson.

As Balph is silent as to the use or adaption of their counter circuit for use in generating random numbers having a Poisson distribution, and as Resnikoff clearly specifies use of a random Poisson schema, there can be no motivation to combine the references as proposed in the rationale for the rejections for the following reasons:

(a) uniform and Poisson distributions are not the same;

(b) replacing Resnikoff's Poisson distribution function with a uniform distribution function may render Resnikoff undesirable for it's intended function;

(c) Resnikoff in view of Balph fails to teachs all of our claimed steps, elements, and limitations.

Confusion should be avoided when considering when and how the terms uniform and non-uniform are used in our disclosure and in the references. In one use, the term is being used to describe the distribution of numbers, such as our CRC process and Balph's counter, which generate random numbers with a uniform distribution. We then use these numbers as *offsets* from uniformly spaced points on a physical row for the placement of sensors, thus giving us an array of sensors having non-uniform spacing (e.g. randomized), but in which the offset values from uniform points on the array are uniformly distributed.

Resnikoff, however, applies a Poisson (e.g. non-uniform) distribution function to achieve a physical sensor row having a randomized positioning arrangement, but their underlying offset values from uniformly spaced points on the array will have a Poisson distribution, not a uniform distribution.

For these reasons, Appellant requests reversal of the rejections of claims 1 - 4, 6 - 9, 10, 12 - 17, and 19 - 21.

Summary of Arguments

For the foregoing reasons, it is submitted that the rejections of Claims 1 - 19 were erroneous, and Appellant requests reversal of the rejections.

Respectfully Submitted,

Robert Frantz

Agent for Appellant(s)
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Claims Appendix

per 37 CFR §41.37(c)(1)(viii)

Clean Form of Amended Claims

Claim 1 (previously amended):

A method of producing a two-dimensional sensor array for imaging, comprising the steps of:

determining a plurality of sensor positions, each position having a spacing in a first axis from a datum point according to a first non-uniform predictable deterministic distribution schema, and each position having a spacing in a second axis from said datum point according to a second predictable deterministic non-uniform distribution schema;

providing a two-dimensional array of sensors, each sensor being positioned on said array according to the determined positions in said first and second axes; and

providing a means for sampling said sensors such that a two-dimensional imaging sensor array having non-uniform sensor distribution is realized.

Claim 2 (original):

The method as set forth in Claim 1 wherein said first schema comprises a pseudo-random schema.

Claim 3 (original):

The method as set forth in Claim 1 wherein said first schema comprises a nonlinear polynomial schema.

Claim 4 (original):

The method as set forth in Claim 1 further comprising the step of assigning one or more reference identifiers to said first and second non-uniform distribution schema.

Claim 5 (original):

The method as set forth in Claim 1 wherein said second schema comprises a pseudo-random schema.

Claim 6 (original):

The method as set forth in Claim 1 wherein said second schema comprises a nonlinear polynomial schema.

Claim 7 (previously amended):

The method as set forth in Claim 1 further comprising the steps of:

creating a dithered set of data samples by sampling said non-uniformly spaced sensors, said dithered set of data samples representing an image; and

performing interpolation to synthesize a set of data samples representing uniformly spaced data samples from said dithered set of data samples, said uniformly spaced data samples representing said image according to uniformly distributed sensors.

Claim 8 (original):

The method as set forth in Claim 7 wherein said step of performing interpolation to synthesize a set of data samples representing uniformly spaced data samples comprises performing linear interpolation.

Claim 9 (previously amended):

A computer readable medium encoded with software for creating a synthesized uniformly-spaced data set from a dithered data set in an imaging system,
said software performing the steps of:

receiving a dithered set of data samples, said dithered set of data samples representing an image sampled by a plurality of sensors, wherein said sensors are positioned positions with a spacing in a first axis from a datum point according to a first non-uniform predictable deterministic distribution schema, and each sensor having a position spacing in a second axis from said datum point according to a second predictable deterministic non-uniform distribution schema; and

performing interpolation to synthesize a set of data samples representing uniformly spaced data samples from said dithered set of data samples, said uniformly spaced data samples representing said image according to uniformly distributed sensors.

Claim 10 (original):

The computer readable medium as set forth in Claim 9 wherein said software for performing interpolation comprises software for performing linear interpolation.

Claim 11 (original):

The computer readable medium as set forth in Claim 9 further comprising software for performing the step of receiving a reference identifier associated with distribution

schema

of said dithered data set, and wherein said software for performing interpolation comprises software for performing interpolation based upon said distribution schema.

Claim 12 (previously amended):

A digital imaging system comprising:

a sensor array means, said sensor array having a set of sensors arranged in first axis in a non-uniform predictable deterministic manner according to a first schema and in a second axis in a non-uniform predictable deterministic manner according to a second schema;

a sampling means for sampling said sensors; and

a dithered data set creation means for storing data samples from said sampling means.

Claim 13 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said first axis according to a pseudo-random schema.

Claim 14 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said first axis according to a nonlinear polynomial schema.

Claim 15 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said second axis according to a pseudo-random schema.

Claim 16 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said second axis according to a polynomial schema.

Claim 17 (original):

The digital imaging system as set forth in Claim 12 further comprising an interpolation means for synthesizing a uniformly-spaced data sample set from said dithered data sample set.

Claim 18 (original):

The digital imaging system as set forth in Claim 18 wherein said interpolation means comprises a linear interpolation means.

Claim 19 (original):

The digital imaging system as set forth in Claim 18 further comprising a means for receiving an reference identifier associated with said first and second distribution schema and selecting an interpolation means according to said first and second distribution schema.

Evidence Appendix

per 37 CFR §41.37(c)(1)(ix)

No evidence has been submitted by applicant or examiner pursuant to 37 CFR §§1.130, 1.131, or 1.132.

Related Proceedings Appendix

per 37 CFR §41.37(c)(1)(x)

No decisions have been rendered by a court or the Board in the related proceedings as identified under 37 CFR §41.37(c)(1)(ii).

FRANKLIN GRAY PATENTS, LLC
ROBERT H. FRANTZ, REGISTERED US PATENT AGENT

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TO: Examiner Sathyanaraya V. Perungavoor
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FROM: Robert H. Frantz
Franklin Gray Patents, LLC
Tel: 405-812-5613
Fax: 405-440-2465

DATE: October 12, 2005

PAGES: 16 (inclusive)

In re the Application of:

Viktors Berstis)

Serial Number: 10/015,492) Group: 2625

Docket Number: AUS920011012US1) Examiner: Sathyanaraya V. Perungavoor

Filed on: 12/13/2001)

For: "System and Method for Anti-Moiré Imaging in a Two Dimensional Sensor Array")

Certificate of Transmission under 37 CFR §1.8

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office on:

DATE: Oct. 12, 2005

SIGNATURE: Robert Frantz

Robert H. Frantz, Reg. No. 42,553

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FEE TRANSMITTAL for FY 2005

Effective 12/08/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	(*) $ 500.00

Complete If Known	
Application Number	10/015,492
Filing Date	12/13/2001
First Named Inventor	Viktors Berstis
Examiner Name	Sathyanaraya V. Perungavoor
Art Unit	2625
Attorney Docket No.	AUS920011012US1

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify): ____________

☒ Deposit Account:

Deposit Account Number: 09-0447 Deposit Account Name: IBM Corporation

The Director is authorized to: *(check all that apply)*

☒ Charge fee(s) indicated below
☒ Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17
☐ Charge fee(s) indicated below, **except for the filing fee**
☒ Credit any overpayments

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

FEE CALCULATION

Application Type	FILING FEES Fee ($)	Small Entity Fee ($)	SEARCH FEES Fee ($)	Small Entity Fee ($)	EXAMINATION FEES Fee ($)	Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

FEE DESCRIPTION	Fee ($)	Small Entity Fee ($)
• Each claim over 20 or, for reissues, each claim over 20 and more than in the original patent	50	25
• Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
• Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee($)		Fee Paid ($)
	- 20 or HP=		X	50	=	

HP = highest number of total claims paid for, if greater than 20

Multiple Dependent Claims Fee ($)	Fee Paid ($)
360 x	

Indep. Claims		Extra Claims		Fee($)		Fee Paid ($)
	- 3 or HP=		X	200	=	

HP = highest number of total claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is **$250** for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41 (a)91)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee($)		Fee Paid ($)
	- 100 =		/50 =	(round up to a whole number)	X	250	=	

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee	
Other: Fee for filing a Brief in support of an Appeal (41.20(b)(2)	$500.00

SUBMITTED BY					
Name	Robert H. Frantz	Registration No.	42,553	Telephone	405-812-5613
Signature	Robert Frantz			Date	10/12/05

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01 FC:1402 500.00 DA

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> ...
>
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(b) replacing Resnikoff's Poisson distribution function with a uniform distribution function may render Resnikoff undesirable for it's intended function;

(c) Resnikoff in view of Balph fails to teachs all of our claimed steps, elements, and limitations.

Confusion should be avoided when considering when and how the terms uniform and non-uniform are used in our disclosure and in the references. In one use, the term is being used to describe the distribution of numbers, such as our CRC process and Balph's counter, which generate random numbers with a uniform distribution. We then use these numbers as *offsets* from uniformly spaced points on a physical row for the placement of sensors, thus giving us an array of sensors having non-uniform spacing (e.g. randomized), but in which the offset values from uniform points on the array are uniformly distributed.

Resnikoff, however, applies a Poisson (e.g. non-uniform) distribution function to achieve a physical sensor row having a randomized positioning arrangement, but their underlying offset values from uniformly spaced points on the array will have a Poisson distribution, not a uniform distribution.

For these reasons, Appellant requests reversal of the rejections of claims 1 - 4, 6 - 9, 10, 12 - 17, and 19 - 21.

Summary of Arguments

For the foregoing reasons, it is submitted that the rejections of Claims 1 - 19 were erroneous, and Appellant requests reversal of the rejections.

Respectfully Submitted,

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Claims Appendix

per 37 CFR §41.37(c)(1)(viii)

Clean Form of Amended Claims

Claim 1 (previously amended):

A method of producing a two-dimensional sensor array for imaging, comprising the steps of:

determining a plurality of sensor positions, each position having a spacing in a first axis from a datum point according to a first non-uniform predictable deterministic distribution schema, and each position having a spacing in a second axis from said datum point according to a second predictable deterministic non-uniform distribution schema;

providing a two-dimensional array of sensors, each sensor being positioned on said array according to the determined positions in said first and second axes; and

providing a means for sampling said sensors such that a two-dimensional imaging sensor array having non-uniform sensor distribution is realized.

Claim 2 (original):

The method as set forth in Claim 1 wherein said first schema comprises a pseudo-random schema.

Claim 3 (original):

The method as set forth in Claim 1 wherein said first schema comprises a nonlinear polynomial schema.

Claim 4 (original):

The method as set forth in Claim 1 further comprising the step of assigning one or more reference identifiers to said first and second non-uniform distribution schema.

Claim 5 (original):

The method as set forth in Claim 1 wherein said second schema comprises a pseudo-random schema.

Claim 6 (original):

The method as set forth in Claim 1 wherein said second schema comprises a nonlinear polynomial schema.

Claim 7 (previously amended):

The method as set forth in Claim 1 further comprising the steps of:

creating a dithered set of data samples by sampling said non-uniformly spaced sensors, said dithered set of data samples representing an image; and

performing interpolation to synthesize a set of data samples representing uniformly spaced data samples from said dithered set of data samples, said uniformly spaced data samples representing said image according to uniformly distributed sensors.

Claim 8 (original):

The method as set forth in Claim 7 wherein said step of performing interpolation to synthesize a set of data samples representing uniformly spaced data samples comprises performing linear interpolation.

Claim 9 (previously amended):

A computer readable medium encoded with software for creating a synthesized uniformly-spaced data set from a dithered data set in an imaging system, said software performing the steps of:

receiving a dithered set of data samples, said dithered set of data samples representing an image sampled by a plurality of sensors, wherein said sensors are positioned positions with a spacing in a first axis from a datum point according to a first non-uniform predictable deterministic distribution schema, and each sensor having a position spacing in a second axis from said datum point according to a second predictable deterministic non-uniform distribution schema; and

performing interpolation to synthesize a set of data samples representing uniformly spaced data samples from said dithered set of data samples, said uniformly spaced data samples representing said image according to uniformly distributed sensors.

Claim 10 (original):

The computer readable medium as set forth in Claim 9 wherein said software for performing interpolation comprises software for performing linear interpolation.

Claim 11 (original):

The computer readable medium as set forth in Claim 9 further comprising software for performing the step of receiving a reference identifier associated with distribution schema

of said dithered data set, and wherein said software for performing interpolation comprises software for performing interpolation based upon said distribution schema.

Claim 12 (previously amended):

A digital imaging system comprising:

a sensor array means, said sensor array having a set of sensors arranged in first axis in a non-uniform predictable deterministic manner according to a first schema and in a second axis in a non-uniform predictable deterministic manner according to a second schema;

a sampling means for sampling said sensors; and

a dithered data set creation means for storing data samples from said sampling means.

Claim 13 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said first axis according to a pseudo-random schema.

Claim 14 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said first axis according to a nonlinear polynomial schema.

Claim 15 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said second axis according to a pseudo-random schema.

Claim 16 (original):

The digital imaging system as set forth in Claim 12 wherein said sensors of said sensor array means are arranged in said second axis according to a polynomial schema.

Claim 17 (original):

The digital imaging system as set forth in Claim 12 further comprising an interpolation means for synthesizing a uniformly-spaced data sample set from said dithered data sample set.

Claim 18 (original):

The digital imaging system as set forth in Claim 18 wherein said interpolation means comprises a linear interpolation means.

Claim 19 (original):

The digital imaging system as set forth in Claim 18 further comprising a means for receiving an reference identifier associated with said first and second distribution schema and selecting an interpolation means according to said first and second distribution schema.

Evidence Appendix

per 37 CFR §41.37(c)(1)(ix)

No evidence has been submitted by applicant or examiner pursuant to 37 CFR §§1.130, 1.131, or 1.132.

Related Proceedings Appendix

per 37 CFR §41.37(c)(1)(x)

No decisions have been rendered by a court or the Board in the related proceedings as identified under 37 CFR §41.37(c)(1)(ii).

FRANKLIN GRAY PATENTS, LLC
ROBERT H. FRANTZ, REGISTERED US PATENT AGENT

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Fax: 571-273-8300 (Central Fax Server)

FROM: Robert H. Frantz
Franklin Gray Patents, LLC
Tel: 405-812-5613
Fax: 405-440-2465

DATE: October 12, 2005

PAGES: 16 (inclusive)

Re-transmitting due to earlier transmission error.

In re the Application of:

Viktors Berstis	)
Serial Number: 10/015,492	)
Docket Number: AUS920011012US1	)
Filed on: 12/13/2001	)
For: "System and Method for Anti-Moiré Imaging in a Two Dimensional Sensor Array"	)

Group: 2625

Examiner: Sathyanarayа V. Perungavoor

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FEE TRANSMITTAL for FY 2005

Effective 12/08/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (*) $ 500.00

Complete if Known	
Application Number	10/015,492
Filing Date	12/13/2001
First Named Inventor	Viktors Berstis
Examiner Name	Sathyanaraya V. Perungavoor
Art Unit	2625
Attorney Docket No.	AUS920011012US1

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify): ____

☒ Deposit Account:

Deposit Account Number: 09-0447 Deposit Account Name: IBM Corporation

The Director is authorized to: *(check all that apply)*

☒ Charge fee(s) indicated below
☒ Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17
☐ Charge fee(s) indicated below, except for the filing fee
☒ Credit any overpayments

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

FEE CALCULATION

Application Type	Filing Fee ($)	Filing Small Entity Fee ($)	Search Fee ($)	Search Small Entity Fee ($)	Examination Fee ($)	Examination Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

FEE DESCRIPTION

	Fee ($)	Small Entity Fee ($)
• Each claim over 20 or, for reissues, each claim over 20 and more than in the original patent	50	25
• Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
• Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee($)		Fee Paid ($)
	- 20 or HP=		X	50	=	

HP = highest number of total claims paid for, if greater than 20

Multiple Dependent Claims Fee ($)	Fee Paid ($)
360 x	

Indep. Claims		Extra Claims		Fee($)		Fee Paid ($)
	- 3 or HP=		X	200	=	

HP = highest number of total claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41 (a)91)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee($)		Fee Paid ($)
	- 100 =		/50 =	(round up to a whole number)	X	250	=	

4. OTHER FEE(S) Fees Paid ($)

Non-English Specification, $130 fee

Other: Fee for filing a Brief in support of an Appeal (41.20(b)(2) $500.00

SUBMITTED BY					
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Signature	Robert Frantz			Date	10/12/05